

although Small in N. Am. Fl. does not give *Wislizeni* as occurring in U. S. Is probably the same plant referred by Trelease in Syn. Fl. N. Am. to *G. mexicanum* HBK. and stated to have been collected by Lemmon in the Huachuca Mts. True *mexicanum* appears, however, to be annual or at most biennial, and probably does not reach the U. S. Flowering specimens desired. T. H. K." As far as we know, no specimens of *G. mexicanum* have been collected in the United States.

Geranium Wislizeni is clearly distinguishable from *G. lentum* by its smaller and more delicate, cymose inflorescence, small sepals, and shorter styler columns; also by the general lack of glandularity on the stems and leaves.

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REDISCOVERY OF *CALTHA NATANS* IN MINNESOTA

OLGA LAKELA

A HITHERTO unknown station of *Caltha natans* Pall. in Minnesota was discovered by the writer on August 4, 1942, at Deep Lake, Sparta. It is situated at the mouth of the inlet creek of Deep Lake. A recent sinking of the water level of the lake caused by a reclamation of a water-filled mine at Gilbert, 1.5 miles distant, left the creek bed nearly dry and about fifteen feet above the present shore line. The plants in the surviving colony were found growing in the eroding sand of the creek bed, creeping toward moisture. Among the larger plants in flower and fruit were young seedlings. Some of the seedlings were also observed on the lake shore, among those of *Alisma*, *Bidens* and *Sagittaria* spp. Obviously the seedlings had developed from germination of seeds washed down in the sediment from the colony established in the creek bed.

C. natans was first known in Minnesota about fifty years ago. The earliest collection was made by E. J. Hill at Tower on August 21, 1889. Two years later J. H. Sandberg encountered the species at "Vermillion". The place name on Dr. Sandberg's collections obviously refers to Lake Vermilion. Due to insuffi-

cient data on herbarium labels it is not clear whether or not the cited collections were made in the same locality. Tower is situated on Lake Vermilion, and the species was collected again at Tower in 1904 and 1905 by H. L. Lyon.

During the last forty years *C. natans* seems to have disappeared from its first known localities in Minnesota. Repeated efforts to find it in the Tower and Lake Vermilion area have failed. Equally futile have been the attempts to locate it on certain Canadian border lakes in Lake County where it reportedly occurs. Therefore, it was not altogether without surprise that the writer learned from Dr. N. C. Fassett of the finding of *C. natans* at Foxboro, Wisconsin as late as 1917. On July 4, 1942, the writer located the Foxboro colony in a partly filled-in *Typha-Salix* swamp on Great Northern Railroad tracks about one mile from the Foxboro station and the same distance from Minnesota state line. However, a later study of the area revealed that the site of the main colony is in the creek about half a mile north of the tracks. The creek crosses the tracks through a culvert, flows through a cultivated field into a forest where its channel, obstructed by fallen trees, forms sizable ponds. In these ponds *C. natans* is well established.

The range of distribution of *C. natans* is restricted to subarctic and north temperate regions of Eurasia and western North America. From the 60th° E. meridian west of the Ural Mountains through Siberia and Alaska to 92.5° W. meridian in Minnesota, the species more than half encircles the globe. Latitudinally its range on each continent extends from the arctic circle to about the 45th° N. parallel.

In Europe the species is known from Perm Province, 58° N. latitude, in Russia. In Siberia the range extends from Vilju District, 68° N. latitude to Manchuria and Spassk Province on 45th° N. parallel. Several collections have been made in the Transbaikal region and in the upper Amur and Lena River basins. The species also occurs in north and west Kamtchatka.

In North America *C. natans* occurs in isolated colonies from the coast of Alaska to the center of the continent. The northernmost station where the plant has been collected is at Circle Hot Springs. It is encountered at Fairbanks and Nome. From Alaska its range extends through Tupper Creek, British Colum-

bia, to Alberta with several collections from Athabasca, Peace River and Lesser Slave District. Leaving Edmonton, the next known station is at Ingolf, Ontario, about 20 miles north of the Northwest Angle of Minnesota; thence to Tower,¹ Sparta and on to Foxboro, Wisconsin, at 46.5° N. latitude, the southernmost known station on the continent.

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SCIRPUS LONGII IN NORTH CAROLINA.—In 1911 I described from Burlington and Camden Counties, New Jersey, and from Norfolk County, Massachusetts, a very characteristic woolgrass, the distinctions of which had been already worked out by its discoverer, Mr. Bayard Long; a rather coarse species, differing at once from the northern and transcontinental *S. atrocinctus* Fern., in its glutinous or glandular involucre, large spikelets with long scales, long anthers, whitish and very long perianth-bristles and broad 3-angled reddish to castaneous achenes. This is *S. Longii* Fern. in RHODORA, xiii. 6 (1911). Subsequently localized colonies have been found in other counties of eastern Massachusetts, with isolated ones in central Connecticut and on Long Island; and in 1941 Weatherby² got it in Queens County, Nova Scotia, with *Lophiola septentrionalis* Fern., the Nova Scotian representative of the New Jersey *L. americana* (Pursh) Wood, and near the first station east of Cape Cod for the Coastal Plain *Lachnanthes tinctoria* (Walt.) Ell. *Scirpus Longii*, therefore, has shown itself to be an old Coastal Plain type which, like so many other species, became isolated in Nova Scotia before the late Tertiary or early Pleistocene submergence of the continental shelf.

Several of the distinctive plants of southern New Jersey or adjacent Delaware (such as *Panicum leucothrix* Nash, *Habenaria integra* (Nutt.) Spreng., *H. nivea* (Nutt.) Spreng., *Rhexia aristosa* Britt., *Lobelia Canbyi* Gray and *L. Boykinii* T. & G.) are unknown between their northern area and the Coastal Plain of

¹ Tower, "Mich." in illustrated Flora, Britton and Brown, II: 52, 1897 is obviously an error. There are no collections from Michigan.

² See Weatherby, RHODORA, xliv. 232, 233 (1942).